

## Frequency of Her2/neu expression in colorectal adenocarcinoma: A study from developing South Asian country

Asma Shabbir, Talat Mirza, Abdullah Bin Khalid and Muhammad Asif Qureshi  
Jinnah Sindh Medical University, Pakistan

**Background & Purpose:** Human Epidermal Growth Factor (Her-2/neu) has strong therapeutic implications in certain cancers like breast and gastric cancer. Literature on its frequency in colorectal cancer is scarce. In this study, we have investigated the frequency of Her-2/neu expression in colorectal adenocarcinomas and its association with various clinicopathological variables.

**Methods:** A total of 95 patients who underwent colonoscopic biopsy or colectomy were studied after institutional ethical approval. Hematoxylin & eosin (H&E) staining was performed on all the tissue sections. Expression of Her-2/neu was investigated by immunohistochemistry using anti-Her-2 antibody. In order to quantify Her-2/neu expression, three criteria were applied that include the pattern of staining, intensity of staining and percentage of tumor cells stained. Furthermore, its association was seen with various clinicopathological variables including age, gender, histopathological type, grade and stage of the tumor. Data was entered and analyzed using SPSS version 21. A p-value of <0.05 was considered as significant.

**Results:** From the total of 95 cases, 75 (78.9%) cases showed Her-2/neu expression. Pattern of Her-2/neu staining was significantly associated with the grade (p-value=0.030) and type of colorectal cancer (p-value=0.024). We also observed a significant association between percentage of cells stained and tumor type (p-value=0.006).

**Conclusion:** Her2/neu is considerably expressed in colorectal adenocarcinoma in Pakistani population. Our findings indicate a significant strong association of cytoplasmic Her-2/neu expression with low grades and membranous Her-2/neu expression with high grades of colorectal cancer.

### Biography

Asma Shabbir has a passion towards research and is concerned for better prognosis of the illnesses (especially cancer patients). Her primary area of expertise is diagnostic pathology and also adores to teach the medical students. Her dissertation work involved evaluation of Her-2/neu in gastric and colorectal adenocarcinomas, the basis of option for better prognosis to these patients in this new era of personalized medicine.

drasma52@gmail.com

### Notes: